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APPLICATION NO.	. FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,481	07/11/2003	Tony Hollingsworth	UNMC.63188	8213
110 7590 11/19/2007 DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET			EXAMINER	
			YU, MISOOK	
SUITE 2400 PHILADELPH	IA, PA 19103-2307	·	ART UNIT	PAPER NUMBER
	,			<u> </u>
			MAIL DATE	DELIVERY MODE
			11/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/618,481	HOLLINGSWORTH ET AL.				
Office Action Summary	Examiner	Art Unit				
	MISOOK YU	1642				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v. - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS for cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>05 March 2007 and 05 September 2007</u> .						
)☐ This action is FINAL . 2b)☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under E	Ex parte Quayre, 1935 O.D. 11,	700 0.0. 210.				
Disposition of Claims						
4) Claim(s) 1.2 and 4-6 is/are pending in the app	lication.					
4a) Of the above claim(s) <u>2</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
•	6) Claim(s) 1, 4-6 is/are rejected.					
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Olamin(s) are subject to rectioned affects the first state of the subject to rection affects the first state of the subject to rection affects the first state of the subject to rection affects the subject to rect						
Application Papers						
9)☐ The specification is objected to by the Examiner. 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) acc	drawing(s) he held in abevance.	See 37 CFR 1.85(a).				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
a) ☐ All b) ☐ Some c) ☐ None of. 1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Sumr					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		ail Date nal Patent Application				
3) Information Disclosure Statement(s) (P10/36/06) Paper No(s)/Mail Date	6) Other:	· · · · · · · · · · · · · · · · · · ·				

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The Examiner of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Examiner Misook Yu.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of species SEQ ID NO: 47 in the reply filed on 09/05/2007 is acknowledged. The traversal is on the ground(s) that there would be no serious burden on the examiner because SEQ ID NO: 1 has been already searched. This is not found persuasive because the prosecution history indicates SEQ ID NO: 1 is anticipated by prior art and searching fragments of a known polypeptide put a serious search burden. There are over 50 different species recited in claim 1, and searching them all would put a serious burden. Since they are peptides, up to 10 different SEQ ID Nos would be searched and examined.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC 102

Claims 1 and 3 remain rejected and new claims 4-6 are under 35 USC 10(b) as being anticipated by WO 02/058450.

Applicants argue that applicants disclose MUCI peptides for eliciting an immune response to MUCI-expressing tumor cells. These peptides are 9 to 15 amino acids in length and are set forth in Tables 3-4 and in the paragraph bridging pages 17 and 18. The prior art references neither teach nor suggest the peptides of the present invention.

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Applicant's arguments have been considered but have not been found to be persuasive because applicant argues with limitation not present in the claims. The preferred embodiment of the claimed invention, i.e. SEQ ID NO: 47 consists of 30 amino acids, not 9-15 amino acids, and the art of record teaches such polypeptide. Note the sequence alignment. If applicant desires to exclude the longer prior art sequences, then claims should be drafted accordingly.

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WO200258450-A2.
PN
XX
    01-AUG-2002.
PD
    26-DEC-2001; 2001WO-US049923.
PF
XX
    22-DEC-2000; 2000US-0257590P.
    27-JUL-2001; 2001US-0308307P.
PR
XX
    (DAND ) DANA FARBER CANCER INST INC.
XX
ΡI
    Kufe DW;
XX
    WPI; 2002-666881/71.
DR
XX
     Identifying compounds that inhibit the binding of MUC1 to a tumor
PT
     progressor, or inhibits the phosphorylation of MUC1 by the tumor
PT
     progressor, by contacting the MUC1 test agent with the tumor progressor
PT
     in the presence of the test compound.
PΤ
XX
     Example 6; Fig 7A; 82pp; English.
PS
XX
     The present sequence is the N-terminal portion of the cytoplasmic domain
CC
     (CD) of MUC1, a glycoprotein expressed aberrantly at high levels over the
CC
     surface of several types of carcinoma cells. The N-terminal MUC1/CD
CC
     fragment was used in an example from the invention in which the site in
CC
     MUC/CD that binds to p120ctn was identified. MUC1 (see ABB79839) has been
     shown to bind via its CD to c-Src, epidermal growth factor receptor (EGF-
CC
     R), p120ctn and protein kinase C (PKC)-delta. c-Src, EGF-R and PKC-delta
CC
     phosphorylate the MUC1 CD, leading to enhanced binding of beta-catenin to
     MUC1. Phosphorylation by EGF-R leads to enhanced binding of c-Src to
CC
     MUC1. The invention features methods of identifying compounds that
СС
     inhibit (a) the binding of MUC1 to a tumour progressor (e.g. beta-
     catenin, c-Src, EGF-R, p120ctn, or PKC-delta) and/or (b) phosphorylation
CC
     of MUC1 by tumour progressors with kinase activity (e.g. c-Src, EGF-R or
CC
    PKC-delta). Methods for inhibiting an interaction between MUC1 and beta-
    catenin, e.g. using a MUC1/CD peptide (see ABB79844), and for inhibiting
CC
     expression of MUC1 or a tumour progressor in a cell, e.g. using an
CC
     antisense oligonucleotide, are provided, especially where the cell is a
CC
     cancer cell, such as a breast cancer cell, or a lung, colon, pancreatic,
CC
     renal, stomach, liver, bone, haematological (e.g. leukaemia, lymphoma),
CC
     neural tissue, melanoma, ovarian, testicular, prostate, cervical, vaginal
     or bladder cancer cell
CC
XX
     Sequence 43 AA;
                          100.0%; Score 179; DB 5; Length 43;
  Query Match
                          100.0%; Pred. No. 8.2e-20;
  Best Local Similarity
                                                               O; Gaps
                                                                             0:
                                 O; Mismatches
                                                   0; Indels
  Matches 30; Conservative
            1 CQCRRKNYGQLDIFPARDTYHPMSEYPTYH 30
              1 CQCRRKNYGQLDIFPARDTYHPMSEYPTYH 30
Dh
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Claims 1 and 3 remain rejected and claims 4-6 are under 35 USC 10(b) as being anticipated by US Patent 6,548,643, for the reasons set forth previously in the Paper mailed March 17, 2006, Section 7, pages 4-5 for the same reason given above.

Art Unit: 1642

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MISOOK YU whose telephone number is 571-272-0839. The examiner can normally be reached on 8 A.M. to 5:30 P.M., every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on 571-272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MISOOK YU Primary Examiner Art Unit 1642

/Misook Yu/